Book title: Object Oriented Macromedia Flash MX
Type: book
Author: Drol, William
ISBN: 1590590147
Publisher: Apress
Publisher's Description: Object-Oriented Macromedia Flash MX teaches object-oriented programming skills using Flash MX ActionScript. It assumes no previous programming experience and encourages Flash users who normally avoid ActionScript. Author William Drol develops a series of related applications using numerous step-by-step instructions and demonstrates the importance of good planning, documentation, and clean coding. By the time readers finish Object-Oriented Macromedia Flash MX, readers will be able to develop highly reusable applications and services that leverage the dynamic features in Flash MX ActionScript.

Reviewer: Harold Thimbleby

Review

Going beyond the basic idea of web pages and links, Flash is one of the most flexible and exciting tools around. Unlike most other web technologies, Macromedia's Flash is proprietary and works exactly the same on all platforms and on all browsers. For anybody wanting to make dynamic, eye-catching content, Flash is the obvious tool to use. Moreover, Flash can be used quite conveniently to design interactive products, like mobile phones, completely simulating their graphical design and user interaction.

Many people who use Flash come to it from a design perspective: after all, it has very convenient and powerful animation and graphics tools. If you then want to learn how to exploit its sophisticated features, particularly its object-oriented programming you will find very little help. Most books that try to introduce Flash's programming give little help beyond the trivial, and typically make no more than embarrassed asides about advanced topics like object orientation.

There is not much competition, then, for William Drol's Object-Oriented Macromedia Flash MX book. Drol's book is a very easy read and introduces powerful programming for Flash. It is easy to work through, and will give any reader a keen insight into Flash's scripting capabilities.

Drol develops programmed animations (bouncing balls with gravity), programmable menus, an XML savvy approach, and even a neat drag-and-drop user interface complete with a working waste basket. Drol's web site provides further resources, as well as some encouraging notes about a second edition of the book.

Given that an introductory book like Drol's cannot cover everything (and that you will anyway also need a reference book), this is a fine introduction to programming Flash. It's surprising that some practical topics are missed out: Flash's online programming reference, for instance, as well as its debugger — but these are minor quibbles compared to my major caveat about the book. Namely, if you are a computer science student you should be warned that almost all of the 'computer science' and object oriented programming is flawed. Although his code works and is motivating, there are serious clangers.

It is horrible being picky in a review, but I'll give a few brief examples, and then make some comments about whether it matters.

First, as perhaps the simplest example, Drol says "concurrent lines of code" (page 118) when he means consecutive lines.

On page 128 we are shown some code like $t = strength \mid\mid 1$, which Drol intends as an idiom for assigning a default value (here, 1) when a variable (here, strength) is undefined. He says the assignment is equivalent to if(strength == undefined) t = 1; else t = strength, which is indeed a default assignment. Unfortunately, the 'idiom' is actually equivalent to if(strength == undefined || strength == 0 || strength == false || strength == null) t = 1; else t = strength, so in particular his idiom does not permit you to assign zero to the variable t, since 1 would be assigned instead.

On pages 260–262 we have a substantial discussion on a workaround to make what Drol calls a dynamic constructor. Unfortunately all of the discussion is based on a surprising confusion between objects and classes. Then on pages 430–432 we have a discussion about event handlers, which is completely wrong-headed: he thoroughly confuses methods and functional values. And he repeatedly says anonymous functions are temporary…

I don't think these errors (and many others of a similar kind) matter very much because Drol's strength is that he gets the reader implementing fun things that work. Provided you are not building a critical application (like a medical device simulator or an e-business web site) it won't matter that you don't understand the computer science underneath. Knowing the right words and using them properly doesn't affect the fun you can have programming Flash. On the other hand, it would be really nice one day to have a rigorous book to help us introduce Flash into the computer science curriculum — equally, it would have been really nice if the folk at Macromedia had implemented an object oriented language that was more rigorously designed and hence easier to understand, or even easier to write books about.